o.: 066821-0281

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant** 

Reed, John C.

Appl. No.

: 10/828,920

Filed

: April 20, 2004

Title

: NOVEL CARD PROTEINS

INVOLVED IN CELL DEATH

REGULATION

Grp./A.U.: 1633

Examiner: : Wehbe, Anne Marie Sabrina

Customer No.: 41552

Confirmation No.: 6166

CERTIFICATE OF MAILING (37 CFR. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Commissioned for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on Jun 2

**TRANSMITTAL** 

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is an Information Disclosure Statement in the above-identified application.

Also attached: 1 Information Disclosure Statement

1 PTO Form 1449 (4 pages)

No References attached pursuant to 37 CFR 1.98(d)

The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 502624, including any filing fees under 37 CFR 1.16 for presentation of extra claims and any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP

Deborah L. Cadena

Registration No. 44,048

4370 La Jolla Village Drive, Suite 700 San Diego, CA 92122 858.535.9001 DLC:llf

Facsimile: 858.597.1585 Date: June 22, 2006

Docket No.: 066821-0281 **PATENT** 

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## INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached form PTO-1449. It is respectfully requested that the references be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

The references were cited by or submitted to the U.S. Patent and Trademark Office in parent application Serial No. 09/388,221, filed September 1, 1999, which is relied upon for an earlier filing date under 35 USC 120. Thus, copies of these references are not attached. 37 CFR

## 10/828,920

1.98(d). Applicants will be pleased to provide copies of the references if requested by the Examiner.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 502624 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

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Please recognize our Customer No. 41552 as our correspondence address.

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				U.S. PATENT	DOCUMENTS					
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	1	us	5,632,994	05-27-1997	REED and SATO					
		US								
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		1		FOREIGN PAT	ENT DOCUMENTS					
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	2	wo	96/12016	04-25-1996					Yes	No
	3	wo	99/40102	08-12-1999						
	4	wo	01/00826	01-04-2001						
	5	wo	01/18042	03-15-2001						
	6	wo	01/30971	05-03-2001						
	7	wo	01/66690	09-13-2001						
	8	wo	01/72822	10-04-2001						
					r, Title, Date, Pertinent Pages, E					
EXAMINER'S INITIALS -	LS CITE NO.   journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.									
******	9	AHMAD et al., "CRADD, a novel human apoptotic adaptor molecule for caspase-2, and FasL/tumor necrosis factor receptor-interacting protein RIP," <u>Cancer Res.</u> 57(4):615-619 (1997)			nd					
	10	BERTIN et al., "Human CARD4 protein is a novel CED-4/Apaf-1 cell death family member that activates NF-κΒ," <u>J. Biol. Chem.</u> 274(19):12955-12958 (1999)								
	11	CARDONE et al., "Regulation of cell death protease caspase-9 by phosphorylation," Science 282(5392):1318-1321 (1998).								
	12	CHINNAIYAN et al., "Role of CED-4 in the activation of CED-3," Nature 388(6644):728-759 (1997)				.8-				
	13	CHINNAIYAN et al., "Interaction of CED-4 with CED-3 and CED-9: a molecular framework for cell death," Science 275(5303):1122-1126 (1997)								

EXAMINER	DATE CONSIDERED

DAMIANO et al., "CLAN, a novel human CED-4-like gene," Genomics. 75(1-3):77-83

DIDONATO et al., "A cytokine-responsive IkB kinase that activates the transcription

factor NF-kB," Nature 388(6642):548-554 (1997)

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

CIT	ATION DISCLOSURE CATION IN AN PPLICATION	ATTY. DOCKET NO. 066821-0281	SERIAL NO. 10/828,920		
*		APPLICANT Reed, John C.			
	_	FILING DATE April 20, 2004	GROUP <b>1633</b>		
16	DING et al., "A single amino acid det interleukin 10," <u>J. Exp. Med.</u> 191(2):2	213-223 (2000)			
17	DURFEE et al., "The retinoblastoma type 1 catalytic subunit," Genes Dev.	7(4):555-569 (1993)			
18	ECK and WILSON, "Gene based the Basis of Therapeutics, ninth edition, (1996)	Chapter 5, McGraw-Hill, Ne	w York, pages 77-101		
19	GEDDES et al., "Human CARD12 is apoptosis," Biochem. Biophys Res C	ommun. 284(1):77-82 (200	1)		
20	GERHOLD and CASKEY, "It's the genes! EST access to human genome content," <u>BioEssays</u> 18(12):973-981 (1996)				
21	GYURIS et al., "Cdi1, a human G1 and S phase protein phosphatase that associates with Cdk2," Cell 75(4):791-803 (1993)				
22	HOFMANN and BUCHER, "The CARD domain: a new apoptotic signalling motif," <u>TIBS</u> 22(5):155-156 (1997)				
23	INOHARA et al., "Nod1, an Apaf-1-like activator of caspase-9 and nuclear factor-kappaB," <u>J. Biol Chem.</u> 274(21):14560-14567 (1999)				
24	proteins' CED-3 and CED-4," <u>FEBS Lett.</u> 406(1-2):189-190 (1997)				
25	25 KOBE and DEISENHOFER, "Proteins with leucine-rich repeats," <u>Curr. Opin. Struct.</u> <u>Biol.</u> 5(3):409-416 (1995)				
26	26 KOONIN and ARAVIND, "The NACHT family - a new group of predicted NTPases implicated in apoptosis and MHC transcription activation," TIBS 25(5):223-224 (2000)				
27	KRAJEWSKI et al., "Release of caspase-9 from mitochondria during neuronal apoptosis and cerebral ischemia," Proc. Natl. Acad. Sci. U S A. 96(10):5752-5757 (1999)				
28	LI et al., "Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade," Cell 91(4):479-489 (1997)				
29	MARSHALL, E., "Gene therapy's growing pains," <u>Science.</u> 269(5227):1050-1055 (1995)				
30	NAGASE et al., "Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins <i>in vitro</i> ," DNA Res. 5(5):277-86 (1998)				
31	The complete sequences of 100 new proteins in vitro," DNA Res. 6(1):63-	ASE et al., "Prediction of the coding sequences of unidentified human genes. XIII. omplete sequences of 100 new cDNA clones from brain which code for large ns <i>in vitro</i> ," DNA Res. 6(1):63-70 (1999)			
32	32 OGURA et al., "Nod2, A Nod1/Apaf-1 Family Member That Is Restricted To Monocytes And Activates NF-κb," <u>J. Biol. Chem.</u> 276(7):4812-4818 (2001)				

EXAMINER	DATE CONSIDERED		

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-			APPLICANT Reed, John C.			
			FILING DATE April 20, 2004	GROUP 1633		
:	33	ORKIN and MOTULSKY, "Report and NIH Investment In Research on Gene December 7, pgs. 1-39 (1995)				
	34	POYET et al., "Identification of Ipaf, a Apaf-1," <u>J. Biol. Chem.</u> 276(30):2830	9-28313 (2001)	•		
	35	QIN et al., "Structural basis of procas activating factor 1," Nature 399(6736)	:549-557 (1999)			
	36	ROTHE et al., "The TNFR2-TRAF signelated to baculoviral inhibitor of apop	otosis proteins," <u>Cell</u> 83(7):1	243-1252 (1995)		
	37	RUSSELL and BARTON "Structural features can be unconserved in proteins with similar folds. An analysis of side-chain to side-chain contacts secondary structure and accessibility," J Mol Biol. 244(3):332-350 (1994)				
	38	RYCHLEWSKI et al., "Comparison of sequence profiles. Strategies for structural predictions using sequence information," <u>Protein Sci.</u> 9(2):232-241 (2000)				
	39	SALEH et al., "Cytochrome c and dA prerequisite for procaspase-9 activati	on," <u>J. Biol. Chem.</u> 274(25)	:17941-17945 (1999)		
	40	SATO et al., "Cloning and sequencing 140(2):291-292 (1994)	•	,		
~	41	SESHAGIRI and MILLER, "Caenorhabditis elegans CED-4 stimulates CED-3 processing and CED-3-induced apoptosis," Curr Biol. 7(7):455-460 (1997)				
•	42	SHAHAM and HORVITZ, "An alternatively spliced C. elegans ced-4 RNA encodes a novel cell death inhibitor," Cell 86(2):201-208 (1996)				
	43	SPECTOR et al., "Interaction between the C. elegans cell-death regulators CED-9 and CED-4," Nature 385:653-656 (1997)				
	44	SRINIVASULA et al., "Autoactivation of procaspase-9 by Apaf-1-mediated oligomerization," Mol. Cell. 1(7):949-57 (1998)				
	45	STAPLETON et al., "The crystal structure of an Eph receptor SAM domain reveals a mechanism for modular dimerization," Nat. Struct. Biol. 6(1):44-49 (1999)				
	46	THOME et al., "Identification of CARDIAK, a RIP-like kinase that associates with caspase-1," <u>Curr. Biol.</u> 8(15):885-888 (1998)				
	47	THORNBERRY and LAZEBNIK, "Caspases: enemies within," <u>Science</u> 281(5381):1312-1316 (1998)				
	48	VAN DER BIEZEN and JONES, "The NB-ARC domain: a novel signalling motif shared by plant resistance gene products and regulators of cell death in animals," <u>Curr. Biol.</u> 8(7):R226-R227 (1998)				
	49	VERMA and SOMIA, "Gene therapy - promises, problems and prospects," Nature 389(6648):239-242 (1997)			-	

EXAMINER	DATE CONSIDERED

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	IATION DISCLOSURE	ATTY. DOCKET NO. 066821-0281	SERIAL NO. 10/828,920			
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		Reed, John C.				
		FILING DATE	GROUP			
		April 20, 2004	1633			
50						
	characterization of novel chemokines sequence tag databases," J. Leukoc.	Biol. 61(5):545-550 (1997)	and expressed			
51						
	mutated in multiple tumor types," Cel					
52	WU et al., "Interaction and regulation Science 275(5303):1126-1129 (1997		of CED-4 by CED-9,"			
53	YANG et al., "Essential role of CED-4 apoptosis," Science 281(5381):1355-	1 oligomerization in CED-3 a 1357 (1998)	activation and			
54	YUAN and HORVITZ, "The Caenorha	YUAN and HORVITZ, "The Caenorhabditis elegans cell death gene ced-4 encodes a				
	novel protein and is expressed during	novel protein and is expressed during the period of extensive programmed cell death,"				
5.5		Development 116(2):309-320 (1992)				
55	ZERVOS et al., "Mxi1, a protein that specifically interacts with Max to bind Myc-Max recognition sites," Cell 72(2):223-232 (1993)					
56	ZOU et al., "Apaf-1, a human protein homologous to C. elegans CED-4, participates in cytochrome c-dependent activation of caspase-3," Cell 90(3):405-413 (1997)					
57	ZOU et al., "An APAF-1.cytochrome c multimeric complex is a functional apoptosome that activates procaspase-9," <u>J. Biol. Chem.</u> 274(17):11549-11556 (1999)					
58	Database Accession No. AB023143					
59	Database Accession No. AB023172					
60	Database Accession No. AC007728					
61	Database Accession No. AC010968					
62	Database Accession No. AC016492					
63	Database Accession No. AC025758					
64	Database Accession No. AC026732					
65	Database Accession No. AQ534686					
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